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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,315	11/04/1999	PAUL D. MARKO	XM-0014	5073

7590 02/23/2005

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EXAMINER

LEE, JOHN J

ART UNIT PAPER NUMBER

2684

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/435,315	MARKO ET AL.	
	Examiner	Art Unit	
	JOHN J LEE	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 17 – 29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 17 and 21 – 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Izadpanah et al. (US Patent number 6,560,213) in view of Dutta (US Patent number 6,301,232).

Regarding **claim 17**, Izadpanah discloses that a satellite digital audio radio multipoint distribution system (Fig. 1 and column 3, lines 25 – column 4, lines 34). Izadpanah teaches that a satellite antenna (antenna (4) in Fig. 1) for receiving a satellite digital audio radio signal (Fig. 1 and column 3, lines 25 – 55, where teaches the antenna of the earth ground station receives the audio or video signal (multimedia signal) from the satellite). Izadpanah teaches that a terrestrial repeater (4 through 8 (earth ground station) in Fig. 1) connected to said antenna (antenna (4) in Fig. 1) for decoding said satellite signal and recording said signal into an intermediate frequency and converting the MM wave satellite radio terrestrial broadcast format signal (Fig. 1, 6 and column 5, lines 37 – column 7, lines 60, where teaches the earth ground station receives multimedia signal from the satellite, and decodes (down converting) into intermediate frequency and then stores the intermediate frequency, also transmits to access interface points that converts

from intermediate frequency into the MM wave satellite radio terrestrial broadcast format signal for transmission). Izadpanah teaches that a system for distributing said recoded MM-wave frequency signal (Fig. 1, 4 and column 5, lines 37 – column 7, lines 60, where teaches distributing the MM-wave frequency signal to the customer interface to convert suitable intermediate frequency). Izadpanah teaches that plural satellite digital audio radio service receivers (customers in Fig. 1) adapted to receive said recorded MM-wave signal from said distributing system (4 in Fig. 1) and provide an audio or visual output signal in response thereto (Fig. 1, 4 and column 4, lines 35 – column 5, lines 36, where teaches receiving the MM-wave frequency signal and converting suitable intermediate frequency for customer).

Izadpanah does not specifically disclose the limitation “recording the signal into an intermediate frequency (IF) satellite radio terrestrial broadcast format signal and a system for distributing said recoded IF frequency signal”. However, Dutta discloses the limitation “recording said signal into an intermediate frequency (IF) satellite radio terrestrial broadcast format signal and a system for distributing said recoded IF frequency signal” (Fig. 1, 2 and column 8, lines 44 – column 9, lines 28, where teaches the terrestrial station (140 through 1) receives the data packet (multimedia signal) in radio frequency from the satellite (155 in Fig. 1) and converting/decoding the RF signal (in 174 in Fig. 2) into suitable intermediate frequency and then demodulating and reformatting the IF signal, also, recording (storing) the IF signal for distributing the IF signal (24 in Fig. 1) to user station (110-112 in Fig. 1)). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of

Izadpanah as taught by Dutta. The motivation does so would be to achieve high quality satellite multimedia broadcasting service for customers in satellite broadcast system.

Regarding **claim 21**, Izadpanah discloses that each of said plural receivers includes a respective user interface to allow for channel selection and audio processing (Fig. 1, 4 and column 4, lines 35 – column 5, lines 36, where teaches channel selected for desired channel by the service selector).

Regarding **claim 22**, Izadpanah discloses that a channel decoder integrated circuit adapted to receive said recoded signal and provide a digital bitstream output in response thereto (Fig. 1, 6 and column 5, lines 37 – column 7, lines 60, where teaches the decoding circuit (converting circuit) stores the signal and provides digital signal output).

Regarding **claim 23**, Izadpanah discloses that a source decoder digital signal processor (160 in Fig. 6) adapted to receive said digital bitstream and provide said output signal in response thereto (Fig. 4, 6 and column 5, lines 37 – column 7, lines 60).

Regarding **claim 24**, Izadpanah discloses that the distribution system is a cable distribution system (Fig. 1, 3 and column 3, lines 31 – column 4, lines 34).

Regarding **claim 25**, Izadpanah discloses that the distribution system is a wireless distribution system (Fig. 1 and column 2, lines 63 – column 3, lines 24).

Regarding **claim 26**, Izadpanah discloses that the distribution system is a fiber-optic distribution system (Fig. 1, 3 and column 3, lines 31 – column 4, lines 34).

Regarding **claim 27**, Izadpanah and Dutta disclose all the limitation, as discussed in claim 17.

Regarding **claim 28**, Izadpanah and Dutta disclose all the limitation, as discussed in claim 17.

Regarding **claim 29**, Izadpanah and Dutta disclose all the limitation, as discussed in claim 17.

4. **Claims 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Izadpanah in view of Dutta and in further view of Marko et al. (US Patent number 6,154,452).

Regarding **claims 18-20**, Izadpanah and Dutta disclose all the limitation, as discussed in claim 17. However, Izadpanah and Dutta do not specifically disclose the limitation “the recorded signal is an XM radio terrestrial frequency multi-carrier modulated signal (XM radio format)”. However, Marko discloses the limitation “the recorded signal is an XM radio terrestrial frequency multi-carrier modulated signal (XM radio format)” (Fig. 1, 3, 16, column 7, lines 41 – column 9, lines 15, where teaches the signal is XM radio format which is a XM radio terrestrial frequency multi-carrier modulated signal). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the systems of Izadpanah and Dutta as taught by Marko. The motivation does so would be to improve broadcasting service for high quality signal reception in satellite broadcast system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2684

Patsiokas et al. (US Patent number 6,724,827) discloses Low Cost Interoperable Satellite Digital Audio Radio Service Receiver Adapted to Receiver Signals in Accordance with Advantageous Frequency Plan.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is (703) 306-5936. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on (703) 308-7745. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
February 14, 2005

John J Lee

to 2/11/05
EDAN ORGAD
PATENT EXAMINER/TELECOMM.